

# CHOATE, HALL & STEWART

A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

EXCHANGE PLACE

53 STATE STREET

BOSTON, MASSACHUSETTS 02109-2804

TELEPHONE (617) 248-5000 • FAX (617) 248-4000

WWW.CHOATE.COM

22278 U.S. PTO  
10/727032  
120203

MAIL STOP PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Express Mail No.:** EV 314103462 US  
**Attorney's Docket No.:** 0492611-0532 (MIT 9851)  
**Date Filed:** December 2, 2003

## **UTILITY PATENT APPLICATION TRANSMITTAL**

(FOR NEW NONPROVISIONAL APPLICATIONS UNDER 37 C.F.R. § 1.53(B))

Dear Sir:

Please find enclosed a patent application and papers as follows for:

### **Inventor(s):**

Given Name (first and middle)	Family Name or Surname	Residence (City and State or Foreign Country)
Kohane	Daniel S.	Newton, MA
Langer	Robert S.	Newton, MA

**Title of the Invention:** Prolonged Suppression of Electrical Activity in Excitable Tissues

### **A) APPLICATION ELEMENTS:**

- 1) ☒ **Fee Transmittal Form** (original and duplicate submitted for fee processing)
- 2) ☒ **Applicant Claims Small Entity Status** (see 37 CFR § 1.27)
  - a) \_\_\_ Statement Verifying Small Entity Status (optional)

3) ☒ **Specification**TOTAL PAGES: 47

(38 pp. description; 8 pp. claims; 1 pg. abstract)

- ☒ Descriptive Title of the Invention
- ☒ Cross References to Related Applications (if applicable)
- ☒ Statement Regarding Federally Sponsored R & D (if applicable)
- ☐ Reference to sequence listing, a table, or a computer program listing appendix
- ☒ Background of the Invention
- ☒ Summary of the Invention
- ☒ Description of the Drawing (if filed)
- ☒ Detailed Description of the Invention
- ☒ Claim(s)
- ☒ Abstract of the Invention

4) ☒ **Drawing(s)** (35 U.S.C. § 113)TOTAL SHEETS: 5

- a) ☐ Formal Drawings (if checked)

5) ☒ **Oath or Declaration**TOTAL PAGES: 3

- a) ☐ Newly Executed (original or copy)
- b) ☐ Copy from a prior application (37 C.F.R. § 1.63(d))-for continuation/divisional application
  - i) ☐ DELETION OF INVENTOR(S): Signed Statement deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).
- c) ☒ Unexecuted

6) ☐ **Application Data Sheet**. See 37 CFR 1.76.7) ☐ **CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)**8) ☐ **Nucleotide and/or Amino Acid Sequence Submission** (if applicable, all are necessary)

- a) ☐ Computer Readable Form (CRF)
- b) ☐ Specification Sequence Listing on:
  - i) ☐ CD-ROM or CR-R (2 copies); or
  - ii) ☐ Paper
- c) ☐ Statements verifying identity of above copies

B) ACCOMPANYING APPLICATION PARTS:

- 9) ☒ **Assignment Papers**
- 10) ☒ **37 C.F.R. § 3.73(b) Statement** (when there is an assignee)
- 11) ☒ **Power of Attorney**
- 12) ☐ **English Translation Document** (if applicable)
- 13) ☐ **Information Disclosure Statement (IDS)/PTO-1449**
- 14) ☐ **Copies of IDS Citations**
- 15) ☐ **Preliminary Amendment**
- 16) ☒ **Return Receipt Postcard (MPEP 503)** (specifically itemized)
- 17) ☐ **Certified Copy of Priority Document(s)** (if foreign priority is claimed)
- 18) ☐ **OTHER:** (if applicable, specified below)  
Establishing the Right of Assignee to Take Action (37 C.F.R. § 3.73(b))

C) FOR CONTINUING APPLICATIONS: (the appropriate box is checked, and certain information is provided below and in a preliminary amendment)

☐ CONTINUATION                      ☐ DIVISIONAL                      ☐ CONTINUATION-IN-PART (CIP)

OF PRIOR APPLICATION NO: \_\_\_\_\_

FILED: \_\_\_\_\_

EXAMINER: \_\_\_\_\_

GROUP/ART UNIT: \_\_\_\_\_

**FOR CONTINUATION OR DIVISIONAL APPLICATIONS ONLY:** The entire disclosure of the prior application, from which an oath or declaration is supplied as detailed above, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

D) METHOD OF PAYMENT OF FILING FEES FOR THIS APPLICATION:

- ☐ Applicant claims small entity status 37 CFR § 1.27
- ☒ A check is enclosed to cover the filing fees as determined on the fee transmittal enclosed herewith
- ☒ The commissioner is hereby authorized to charge any additional filing fees or credit any overpayment to deposit account number 03-1721.


Total filing fee amount \$678.00

E) CORRESPONDENCE ADDRESS:

- ☒ Customer Number: 24280
- ☒ Correspondence Address:

Patent Department  
Attn: C. Hunter Baker, M.D., Ph.D.  
Choate, Hall & Stewart  
53 State Street  
Exchange Place  
Boston, MA 02109  
phone: (617) 248-5000  
fax: (617) 248-4000

Respectfully Submitted,

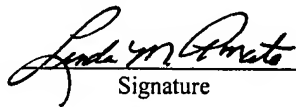
  
C. Hunter Baker, M.D., Ph.D.  
Reg. No.: 46,533

CHOATE, HALL & STEWART  
53 State Street  
Exchange Place  
Boston, MA 02109  
Phone: (617) 248-5000  
Fax: (617) 248-4000

December 2, 2003

Express Mail Number EV 314103462 US  
Date Filed: December 2, 2003

3629622\_1.DOC

Certificate of Mailing	
I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450	
December 2, 2003	
Date	Signature
Linda M. Amato	
Typed or Printed Name of person signing certificate	

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 678.

## Complete if Known

Application Number	Not Yet Assigned
Filing Date	December 2, 2003
First Named Inventor	Daniel S. Kohane
Examiner Name	Not Yet Assigned
Art Unit	Not Yet Assigned
Attorney Docket No.	0492611-0532 (MIT9851)

## METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number: 03/1721  
Deposit Account Name: Choate, Hall & Stewart

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	385.
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$ ) 385.

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims 43 -20\*\* = 23 x 9 = 207.  
Independent Claims 5 -3\*\* = 2 x 43 = 86  
Multiple Dependent ☐ = ☐

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	
1202 18	2202 9	Claims in excess of 20	
1201 86	2201 43	Independent claims in excess of 3	
1203 290	2203 145	Multiple dependent claim, if not paid	
1204 86	2204 43	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)			(\$ ) 293.

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ )

## SUBMITTED BY

Name (Print/Type) C. Hunter Baker

Registration No. 46,533  
(Attorney/Agent)

(Complete if applicable)

Telephone 617-248-4801

Signature

C. Hunter Baker

Date December 2, 2003

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.